ACS5000 Air Cooled Operation & Maintenance

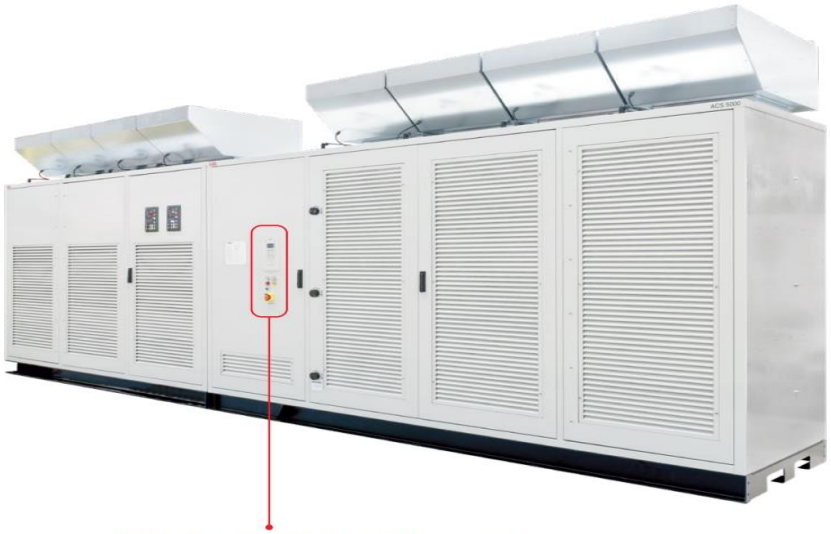
Course goal

The goal of this course is to learn the operation and maintenance aspects of ACS5000 frequency converters.

Main learning objectives

The participants will be able to:

- Identify the hardware components and the installation principles
- Describe the features and advantages of the ACS5000 drive
- Start-up, operate, maintain, and troubleshoot a drive



User-friendly drive control panel for local operation
- Keypad with multi-language display
- Main supply on/off push buttons
- Emergency off push button

Topics

- Generalities
  - ABB medium voltage drives family overview
  - ACS5000 5-level inverter topology and DTC control
- Hardware description (power electronics & control)
  - Component and PCB functions
  - Hardware schematics and electrical drawings
  - PCB settings and configuration
- Operation
  - Energize / de-energize, start-stop sequence
  - Local operation with drive control panel and Drive Window
  - Remote control
- Software introduction
  - Software structure, parameter's description
  - Application configuration, parameter settings
- Fault tracing and troubleshooting
  - Alarm and fault indications
  - Checking and replacing PCB's and components
  - Using Drive Window SW tool for configuration and troubleshooting